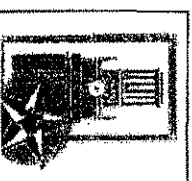


EXHIBIT 4



The Center for Pharmacoeconomic Studies
THE UNIVERSITY OF TEXAS AT AUSTIN
Technical Analysis
Summer 2005

Estimating the Costs of Dispensing Prescription Drugs
within a Chain Pharmacy

Michael Johnsrud, PhD
Kenneth Lawson, PhD

Purpose

Payments to pharmacies for prescription drugs within state Medicaid programs are typically based upon a formula comprised of two components: 1) an estimated drug product acquisition cost, and 2) a professional dispensing fee meant to cover the operational costs, at least in theory. The drug product acquisition component nearly always represents the majority of the payment. As such, recent studies and audits have sought to estimate the average discount off of catalog prices that pharmacies purchase drugs in order to provide program administrators with guidance in calculating a reasonable reimbursement for the product cost component.¹ However, no recent nationwide studies exist that seek to estimate the true cost of dispensing medications in pharmacies.

Dispensing fees within Medicaid programs have remained stagnant, or even declined, over the last few years. This trend has continued in light of increasing labor costs within the pharmacy marketplace. As payments for the drug product acquisition component continue to be discounted, it is important to review the adequacy of the dispensing fee payment in order to maintain equitable reimbursement policies.

Therefore, we surveyed a sample of national and regionally-based chain pharmacies to estimate a current cost of dispensing based upon financial and operational data provided to The Center for Pharmacoeconomic Studies at The University of Texas at Austin.

Methodology

The Center for Pharmacoeconomic Studies at the University of Texas at Austin recently conducted a small survey of national and regional chain pharmacies to estimate the current costs related to dispensing a prescription medication within those stores. Confidential operational and financial data from the most recent corporate fiscal year was provided to the Center by 50 separate pharmacies using a modified survey instrument based upon the NCPA-Pfizer Digest.² These pharmacies combined to dispense over 4.6 million prescriptions within the reported fiscal year.

The particular sample used for the analyses was comprised of both high and low-volume Medicaid dispensing pharmacies across the country, representing 13 different states. Pharmacies were asked to provide sales and expense data for each site included in the study. A list of the expense items included in the cost of dispensing calculation are shown in Figure 1.

Figure 1. Expense Items Included in Cost of Dispensing Calculation

Direct Expense	Weighted by Pharmacy Area	Weighted by Pharmacy Sales
Pharmacist Wages	Utilities	Advertising, Sales, Marketing
Pharmacy Technician Wages	Rent	Business Insurance
Pharmacy Computer Charges	Other Employee Wages	Store Supplies
Pharmacy Payroll Taxes		Office Postage
Fringe Benefits and Bonuses		Delivery Service
		Bad Debt
		Corporate Overhead
		Warehousing Costs
		Inventory Shrinkage

Additionally, pharmacies were surveyed for the total number of prescriptions dispensed during the most recent fiscal year, corresponding with the sales and expense items included in the survey instrument. Only those expenses that directly contributed towards the dispensing of a prescription within the site were included for final cost of dispensing calculations. Where appropriate, expense items were adjusted based upon total pharmacy versus front-end sales and pharmacy area square footage.

Results

Overall, the statistical range of costs of dispensing fell between \$8.85 and \$10.39 per prescription. There is a 95% level of confidence that the true mean falls within this range. Our calculated mean (average) within this particular sample was \$9.61 per prescription (Table 1). The median cost of dispensing for all 50 stores in the sample was \$9.46.

Table 1. Estimated Cost of Dispensing per Prescription¹

Estimate	Cost of Dispensing	
Mean (Average)	\$9.62	
95% Confidence Interval	\$8.85 (Lower)	\$10.39 (Upper)
Standard Deviation	\$2.70	
Median (Middle Point)	\$9.46	

¹Sample size: 50 pharmacy sites, 4,615,350 total prescriptions.

Conclusion

This technical analysis reports results from a sample of chain pharmacy financial operations data for 50 sites across 13 states. While we did not estimate costs for dispensing Medicaid prescriptions exclusively, future studies are needed to examine differences in dispensing costs for Medicaid versus non-Medicaid prescriptions. For example, potential differences in costs related to activities such as coordination of benefit functions, uncollected copayments, and prior authorization requests prior to dispensing should be considered, for comparison, between Medicaid and non-Medicaid prescriptions.

Given that current payments for dispensing fees fall well below our estimate, the results from this preliminary analysis confirm that more widespread studies are needed to estimate the actual costs of dispensing medications to patients. While the sampling method used for this analysis was not necessarily random, it begins to provide us with a description of the broad range of the current costs involved in dispensing prescriptions within a chain pharmacy.

Notes

¹ Department of Health and Human Services, Office of Inspector General, "Medicaid Pharmacy - Actual Acquisition Cost of Brand Name Prescription Drug Products," Report A-06-00-00023, August 2001.

² National Community Pharmacists Association-Pfizer Digest, 2004, Alexandria, VA, 2004.

The Center for Pharmacoeconomic Studies THE UNIVERSITY OF TEXAS AT AUSTIN

Since its establishment in 1994, The Center for Pharmacoeconomic Studies at The University of Texas at Austin has conducted economic and policy research on the impact of pharmaceutical services and products on patients' quality of life and health care outcomes in Texas and across the U.S. The Center serves as a bridge in bringing researchers together from different sectors of the health care delivery system, in addition to fostering collaborations with other academic institutions to disseminate scholarly findings. Researchers at the Center provide expertise in the areas of study design, methodology, data collection and analysis, and interpretation of economic and policy research. The Center also develops and presents educational programming to further the understanding of pharmacoeconomics and its role in the decision-making process within the health care delivery system.

NABSV 01112